

Remarks

Upon entry of the foregoing amendments, claims 21 – 38 are under consideration.

Applicants have cancelled claims 1 – 19 and added new claims 21 – 38 to more clearly and accurately define the polynucleotides of the present invention. Specifically, new claims 21 – 38 are based on cancelled claims 1 – 19, but instead recite polynucleotides which encode “cytokine receptor” polypeptides. Basis for this amendment can be found in the Specification as originally filed, and in particular at pg. 7, lines 23-27.

The present amendment adds no new matter.

THE §101/112, FIRST PARAGRAPH REJECTION

The Examiner has rejected claims 1 – 19 under 35 U.S.C. §101, stating that the claimed invention is not supported by either a substantial and specific asserted utility or a well-established utility. The Examiner has also rejected claims 1 – 19 under 35 U.S.C. §112, first paragraph, alleging that since the claimed invention is not supported by either a specific asserted utility or a well-established utility, one skilled in the art would clearly not know how to use the claimed invention.

Applicants traverse. The present invention is based on the discovery of a novel class II cytokine receptor, which Applicants designated ZcytoR11. *See e.g.*, Specification at pg. 1, lines 26-30. Specifically, ZcytoR11 is described as binding to four-helix-bundle cytokines such as those found within the interferon/IL-10 class:

ZcytoR11, like all known class II receptors except for interferon-alpha/beta receptor alpha chain, has only a single class II CRM in its extracellular domain. **ZcytoR11 appears to be a receptor for a helical cytokine of the interferon/IL-10 class.**

Id at pg. 7, lines 13-27. Concurrent with the discovery of ZcytoR11, Applicants identified IL-20 as a novel IL-10 homolog: “Zcyto10 is of a member of the IL-10 subfamily of cytokines.” *See e.g.* US Patent No. 6,576,743 (Priority date of November 26, 1996). As stated in the present Application, it was subsequently confirmed that ZcytoR11 was, in fact, part of a receptor complex that bound the IL-10 homolog IL-20. *See e.g.*, Dumoutier *et al.*, The Journal of

Immunology, 167:3545-3549, (2001) (copy enclosed), which states that the “IL-20RB also can associate with the IL-22R subunit [HUGO alias for ZcytoR11] and lead to a functional receptor for IL-20...” Thus, ZcytoR11 is a functional receptor subunit for IL-20. Furthermore, IL-20 has been recognized to be involved with skin disorders such as psoriasis. *See e.g.* US Patent No. 6,576,743, which states that “Zcyto10 polypeptides can also be used to treat a number of skin conditions..., for example eczema, psoriasis or dry skin conditions in general or as related skin attentions.” Thus, a receptor subunit for IL-20 would be useful in treating such skin conditions. Accordingly, Applicants assert that ZcytoR11 has a recognizable biological function, namely as a receptor subunit for IL-20, which would be understood and appreciated by one skilled in the art upon reading the present Application. Accordingly, Applicants believe that cancelled claims 1 – 19 should be allowable.

However, in order to expedite prosecution, Applicants have rewritten claims 1 – 19 as new claims 21 – 38, which Applicants believe more accurately define the present invention. Specifically, new claims 21 – 38 now recite polynucleotides which encode “cytokine receptor” polypeptides. Basis for this amendment can be found in the Specification as originally filed, and in particular at pg. 7, lines 23-27. Thus, Applicants believe that the present rejection is now moot. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. §101 and §112, first paragraph is respectfully requested.

CONCLUSION

On the basis of the foregoing amendments and remarks, Applicants respectfully submit that the pending claims are in condition for allowance. If for any reason the Examiner feels that a telephone conference would expedite prosecution of the Application, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

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Respectfully submitted,



Shelby J. Walker
Registration No. 45,192
Attorney for Applicants
c/o ZYMOGENETICS, INC.
1201 Eastlake Avenue East
Seattle, Washington 98102-3702
Tel: (206) 442-6558
Fax: (206) 442-6678

Enclosures:

Amendment Fee Transmittal (in duplicate)
Petition for Extension of Time (in duplicate)
Notice of Appeal (in duplicate)
1 Reference
Postcard